REMARKS

Claims 1-23 are pending in the present application. By this Response, claims 19 and 21 are amended for clarification to correct their preambles to reference the "system" of claim 17. Reconsideration of the claims is respectfully requested.

I. Telephone Interview

Applicants thank Examiner Siddiqi for the courtesies extended to Applicants' representative during the April 29, 2004 telephone interview. During the interview, Applicants' representative asserted the many distinctions of the present claims over the cited references. Examiner Siddiqi stated that the "references are to the claim" and stated that the claims are written broadly. Applicants' representative illustrated, as is set forth in the following remarks, how the claims recite a channel adapter port, which is a physical hardware device, a range of local identification address assigned to the channel adapter port, and bits within the local identification addresses specifying partitions within the end node. Applicants' representative requested that the Examiner show where any one of these features are taught in any of the references. The Examiner failed to do so. The substance of the interview is summarized in the following remarks.

II. 35 U.S.C. § 103, Alleged Obviousness

The Office Action rejects claims 1-23 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Webber et al. (U.S. Patent No. 6,330,555) in view of Tyrrell et al. (U.S. Patent No. 5,185,736). This rejection is respectfully traversed.

As to claims 1-23, the Office Action states:

> 4. AS per claims 1, 9, and 17, Webber discloses a method for routing data packets (col 2, lines 66-67) to multiple partitions (col 7, lines 33-36) within a single end node (col 7, lines 42-48), comprising:
>
> assigning a range (col 13, lines 38-42) of local identification addresses (LIDs)(col 12, lines 50-51) to a channel (col 12, lines 50-51) adapter port (col 14, lines 1-3, it is inherent in socket because socket

requires a unique port address to listen) an end node (col 7, lines 42-48); and

the local identification addresses to specify (col 8, lins 39-45) which of several partitions within the end node (col 7, lines 42-48) is being addressed (col 8, lines 21-30).

Webber is silent about the assigning bits.

However, Tyrrell discloses assigning bits (col 22, lines 50-62).

Therefore, it would have been obvious to one of ordinary skill in the art to combine Webber with Tyrrell because it would provide a single view of the multiple portioned network databases to the end user.

Office Action dated February 4, 2004, pages 2-3.

Claim 1, which is representative of the other rejected independent claims 9 and 17 with regard to similarly recited subject matter, reads as follows:

1. A method for routing data packets to multiple partitions within a single end node, comprising:

assigning a range of local identification addresses (LIDs) to a channel adapter port in an end node; and

assigning bits within the local identification addresses to specify which of several partitions within the end node is being addressed. (emphasis added)

Neither Webber nor Tyrrell, either alone or in combination, teach or suggest a channel adapter port having a range of local identification addresses assigned to it or that bits within the local identification addresses are assigned to specify which of several partitions within the end node is being addressed. This is primarily because neither Webber nor Tyrell teach or suggest a channel adapter, let alone a channel adapter port, or that several partitions within an end node may be addressed via a single channel adapter port, as discussed hereafter.

Webber is directed to a method and apparatus for enabling a view of data across a database. With the Webber system, each user is provided with access to a unique subset of all available data that resides in one or more physical databases. The unique subset is defined by placing objects within logical partitions of the databases and then associating each view or user with a set of the partitions (column 4, lines 20-25). In one

embodiment, separate databases per "view" or user are generated which have unique Database Viewage Tables (column 7, lines 10-20).

Webber does not teach or suggest a channel adapter, a channel adapter port, assigning a range of local identification addresses to a channel adapter port in an end node, or assigning bits within the local identification addresses to specify which of several partitions within the end node is being addressed. To illustrate this lack of teaching in Webber, it should first be noted what a channel adapter is and what a channel adapter port is.

When the claims are read in light of the specification, and using the specification as a dictionary for the terms used in the claims, as is stated on page 11, lines 21-24 of the present specification, a host channel adapter, or simply a channel adapter, is a hardware device that offloads much of the central processing unit and I/O adapter communication overhead and provides a connection to a system area network fabric. The channel adapter may have physical ports that connect to a link of the system area network fabric (page 13, lines 21-26 and page 14, lines 16-18). Thus, the channel adapter and channel adapter port are physical hardware devices. Such devices are not taught or even suggested by Webber.

The Office Action alleges that Webber teaches a channel adapter port at column 12, lines 50-51 and column 14, lines 1-3. Specifically, the Office Action alleges that merely because column 12, lines 50-51 includes the word "channel", column 14, lines 1-3 mention "sockets" which "inherently" requires a unique port address to listen to, that somehow a channel adapter port is taught by Webber. Column 12, lines 50-51 is directed to addresses of each integer in a Dictionary of notification addresses defining a unique message channel. The word "channel" in this context is referring to a stream of messages and is similar to that of a television "channel." The use of the word "channel" in this portion of Webber has nothing to do with a channel adapter which is a hardware device in an end node used to communicate over a system area network fabric.

In addition, while column 14, lines 1-3 states that applications may receive notifications by subscribing to one or more database addresses, then either calling a blocking receive function or listening to a socket, the use of the term "socket" in this context has nothing to do with a physical port of a hardware channel adapter. The term

"socket" in this context refers to a combination of an IP address and a port number. The port number is merely a number assigned to an application, it is not an actual physical port of a channel adapter. Thus, while a "socket" may include a port number, this is not the same as the channel adapter port. Therefore, Applicants respectfully submit that when the claims are read in light of the specification, Webber does not teach or suggest a channel adapter port as recited in independent claims 1, 9 and 17.

Since Webber does not teach or suggest a channel adapter port, Webber cannot teach or suggest assigning a range of local identification addresses to a channel adapter port in an end node. The Office Action alleges that this feature is taught by Webber by a combination of column 13, lines 38-42, column 12, lines 50-51, column 14, lines 1-3 and column 7, lines 42-48. Column 12, lines 50-51 and column 14, lines 1-3 have been addressed above and it has been shown how these portions of Webber do not teach or suggest a channel adapter port as recited in the claims. Furthermore, column 13, lines 38-42 states:

> One embodiment of the disclosed technology is shown by FIG. 15. The system includes a generic notification system that allows the creation of logical "message channels" 1509 such that a message recipient 1505, 1507 can subscribe to zero or more message channels 1509.

Nothing in this section of Webber provides any teaching or even suggest regarding assigning a range of local identification addresses to a channel adapter port. All this section of Webber teaches is that logical "message channels" may be created and a message recipient can subscribe to zero or more of these message channels. There is nothing in this section of Webber that teaches or suggests a channel adapter, channel adapter port, local identification addresses, or assigning a range of local identification addresses to a channel adapter port.

Column 7, lines 42-48 use the term "endnodes" to refer to workstations. While Webber may teach the use of the term "endnodes," Webber does not teach or suggest an endnode having a channel adapter port which is assigned a range of local identification addresses, as recited in claims 1, 9 and 17.

In addition to the above, Webber does not teach assigning bits within local identification addresses to specify which of several partitions within an end node is being addressed. The Office Action admits that Webber does not teach this feature but alleges that Tyrrell teaches his feature at column 22, lines 50-62. Tyrrell is directed to a synchronous optical transmission system for interfacing SONET formatted channels to lower speed channels in either a SONET format or otherwise. The transmission system incorporates a fiber transmission system, terminal multiplexers, and ad/drop multiplexers that in turn incorporate a plurality of features, such as parallel scrambling circuitry, frame synchronization circuitry, and the like.

Column 22, lines 50-62, which is cited by the Office Action as allegedly teaching the feature of "assigning bits within the local identification addresses..." of claim 1, reads as follows:

> These alarms use the interrupt capability provided in the V1 control mechanism. When any of these alarms has a valid change of status, the interface will update the state of its alarm status bit in the V1 interface memory. Each of these alarm status bits are assigned a bit location in a V1 channel word and are sent to the Controller every 4 ms. Whenever a valid change of stat has occurred for any alarm bit, the I bit accompanying the new alarm bit is set. When a VI interrupt is received, the Controller will mask the interrupting channel then decode and process the alarm. The interrupts will remain masked until the interrupt has been cleared.

While this section of Tyrrell mentions that alarm status bits are assigned a bit location in a V1 channel word, nothing in this, or any other, section of Tyrrell teaches or suggests assigning bits in local identification addresses, assigned to a channel adapter port, to specify which of several partitions within an end node is being addressed. In fact, Tyrrell does not even mention assigning bits to specify partitions, whether in a local identification address or some other data structure. To the contrary, the bits mentioned in Tyrrell are status alarm bits, not partition identifying bits.

Moreover, Tyrrell does not provide the necessary teachings or suggestions needed to cure the deficiencies of Webber discussed above. That is, Tyrrell does not teach or suggest a channel adapter port in an end node or assigning a range of local identification

addresses to a channel adapter port in an end node. Thus, any alleged combination of Webber and Tyrrell still would not result in these features being taught or suggested. Furthermore, Webber and Tyrrell are directed to non-analogous art, i.e. they are non-analogous to the present invention and non-analogous to each other. Webber is directed to a mechanism for generating different views of data in databases for various users while Tyrrell is directed to a synchronous optical transmission system. Neither field of technology has anything to do with a method/system/computer program product for routing data packets to multiple partitions within a single end node, such as recited in claims 1, 9 and 17. In order to rely on a reference as a basis for rejection, the reference must be either in the applicant's field of endeavor or, if not, then reasonably pertinent to the particular problem with which the inventor was concerned. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d 1443, 1445 (Fed. Cir. 1992); *In re Deminski*, 796 F.2d 436, 442, 230 U.S.P.Q. 313, 315 (Fed. Cir. 1986). A prior art reference is analogous, and may be combined with other references to establish a prima facie case of obviousness, only if: (1) it falls within the same field of endeavor as the claimed invention; or (2) although from a different field of endeavor, it is reasonably pertinent to the particular problem which the inventor was addressing. *In re Clay*, 966 F.2d 656, 658-69, 23 U.S.P.Q.2d 1058, 1060 (Fed. Cir. 1992). In the present case, neither Webber nor Tyrrell are in the same field as Applicants' field of endeavor and both references are not reasonably pertinent to the problem addressed by the present invention.

In addition, Webber and Tyrrell are not analogous to each other. Determining different views of data in a database (Webber) and providing synchronous optical transmission (Tyrrell) have nothing to do with one another. One of ordinary skill in the art would not even know how to combine these two pieces of art even assuming they were somehow motivated to do so. Moreover, because these references are so different in their basic nature, one of ordinary skill in the art would not have even looked at Tyrrell to solve any problems associated with Webber or looked at Webber to solve any problems associated with Tyrrell.

The combination of elements from nonanalogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness. There must be some reason, suggestion, or

motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge cannot come from the applicant's invention itself. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d 1443, 1446 (Fed. Cir. 1992). In the present case, the Office Action alleges that the "motivation" for the combination of Webber and Tyrrell is that "it would provide a single view of the multiple portioned network databases to the end user." Webber does this already. Why would it be necessary to incorporate Tyrrell in order to achieve a goal that is already achieved by Webber alone? The "motivation" alleged by the Office Action does not address why it would be obvious to combine Tyrrell with Webber but instead is merely a recitation of what Webber does. Thus, the motivation is improper and is not sufficient for supporting the alleged combination.

In view of the above, Applicants respectfully submit that neither Webber nor Tyrrell, either alone or in combination, teach or suggest the features recited in independent claims 1, 9 and 17. At least by virtue of their dependency on claims 1, 9 and 17, respectively, neither Webber nor Tyrrell, either alone or in combination, teach or suggest the features of dependent claims 2-8, 10-16 and 18-23. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-23 under 35 U.S.C. § 103(a).

In addition to the above, neither Webber nor Tyrell, either alone or in combination, teach or suggest the specific features recited in claims 2-8, 10-16 and 18-23. For example, with regard to claims 2 and 10, neither reference teaches or suggest that the bits that are assigned within the local identification addresses of the channel adapter port for specifying which of several partitions within the end node is being addressed are lower order bits. The Office Action alleges that Tyrell discloses this feature at column 99, lines 35-40. While Table 15 in column 99 shows lower order bits, there is nothing in Tyrell that states that these lower order bits are lower order bits of local identification addresses assigned to a channel adapter port or that they identify partitions within the end node.

Regarding claims 3, 11 and 18, neither reference teaches or suggests that the channel adapter port is connected to a system area network. The Office Action alleges that this feature is taught by Webber at column 13, lines 48-50. This section of Webber merely states that the system includes one or more databases, each with a set of

application specific message channels and that each message channel corresponds to a Notification type. There is nothing in column 13, lines 48-50, or anywhere else in Webber, that teaches or suggests a channel adapter port that is connected to a system area network.

With regard to claims 4, 12 and 19, neither reference teaches or suggests that the network contains two raise to the N power end nodes, switches and routers and that the number of bits in a local identification address equals N. The Office Action alleges that this feature is taught by a combination of column 22, lines 50-62, column 6, lines 29-47 and column 5, lines 5-35 of Tyrrell. These sections of Tyrrell merely teach the alarm bits discussed above, that the first 8 bits in telephony information comprise data while the remaining bits represent control information, and other irrelevant teachings. There is nothing in any of these sections, or anywhere else in Tyrrell, that teaches or suggests that a network contains 2N end nodes, switches and routers, and that the number of bits in a local identification address assigned to a channel adapter port is equal to N.

Regarding claims 5-8, 13-16 and 20-23, neither reference teaches or suggests that lower order bits assigned to partitions are designated by a local identification mask control field. The Office Action alleges that this feature is taught at column 6, lines 29-47 and column 22, lines 50-62 of Tyrrell. These sections of Tyrrell merely teach the alarm bits discussed above and that the serial transport frame format comprises sixteen bits per channel with the first eight bits being data and the second eight bits being control information. Nothing in these sections teaches anything regarding a local identification mask control field which is a mask, i.e. a pattern of bits used to accept or reject bit patterns in another set of data, that represents the local identification address mask control field in a channel adapter (see page 23, lines 6-8 of the present specification).

Thus, in addition to being dependent upon respective ones of claims 1, 9 and 17, dependent claims 2-8, 10-16 and 18-23 are also allowable over the alleged combination of Webber and Tyrrell by virtue of the specific features recited in these claims.

III. Conclusion

It is respectfully urged that the subject application is patentable over Webber and Tyrrell and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,

DATE: May 4, 2004

Stephen J. Walder, Jr.
Reg. No. 41,534
Yee & Associates, P.C.
P.O. Box 802333
Dallas, TX 75380
(972) 367-2001
Attorney for Applicants